Air Quality Permitting
Response to Public Comments

June 19, 2017

Tier I Operating Permit No. T1-2016.0021

Project No. 61701

Transcanada GTN Systems, Samuels Station #4
Samuels, Idaho

Facility ID No. 017-00037

Prepared by:
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AIR QUALITY DIVISION

Final

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BACKGROUND

The Idaho Department of Environmental Quality (DEQ) provided for public comment on the draft Tier I operating permit to Transcanada GTN Systems, Samuels Station #4 from March 21, 2017 through April 20, 2017, in accordance with IDAPA 58.01.01.364. During this period, comments were submitted in response to DEQ's proposed action. Each comment and DEQ's response is provided in the following section. All comments submitted in response to DEQ's proposed action are included in the appendix of this document.

PUBLIC COMMENTS AND RESPONSES

Public comments regarding the technical and regulatory analyses and the air quality aspects of the draft permit are summarized below. Questions, comments, and/or suggestions received during the comment period that did not relate to the air quality aspects of the permit application, the Department's technical analysis, or the draft permit are not addressed. For reference purposes, a copy of the Rules for the Control of Air Pollution in Idaho can be found at: adminrules.idaho.gov/rules/current/58/0101.pdf.

Comment 1: First, section 4.1 of the Technical Memorandum (Memo) states that the requirements for 40 CFR 68 were removed. However, those requirements remain in the Draft Permit, so we request clarification as to what, if any, requirements will be removed in the final version of the permit. Second, we request that the final permit reflect the fact that, regardless of DEQ's position on the requirements of 40 CFR 68, the applicant's facility remains subject to the General Duty Clause of section 112(r)(1) of the Clean Air Act. This section states that:

"The owners and operators of stationary sources producing, processing, handling or storing [extremely hazardous substances] have a general duty in the same manner and to the same extent as section 654 of title 29 to identify hazards which may result from such releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize consequences of accidental releases which do occur." 42 U.S.C. §7412(r)(1).

Accordingly, DEQ must list these obligations in the final permit. If DEQ declines to do so, we request an explanation for DEQ's decision.

Response 1: The clause regarding the removal of the requirements for 40 CFR 68 was an errant carryover from permit development and has subsequently been removed. Therefore, the permit requirements remain unchanged and the applicant obligations to 40 CFR 68 are listed in Permit Condition 3.18. DEQ thanks the commenter for identifying the errant statement in the Statement of Basis.

Comment 2: DEQ incorrectly removed fuel-burning equipment requirements from the Draft Permit, and we request that these requirements be reincorporated into the final permit.

Section 4.1 of the Memo states that fuel-burning equipment requirements have been removed, at the request of the applicant, because the "primary use" of the turbines is compressing gases. Based on this assumption, the Memo concludes that because compressing gases is not a "primary use" listed under the definition of fuel-burning equipment at IDAPA 58.01.01.006.45 (5-1-94), the fuel-burning equipment requirements do not apply to the applicant's facility. DEQ misstates Idaho's administrative definition of "fuel-burning equipment" and misapplies the definition of fueling burning equipment to the turbines at the applicant's facility.

At IDAPA 58.01.01.006.45 (5-1-94), the definition of fuel-burning equipment is: "Any furnace, boiler, apparatus, stack and all appurtenances thereto, used in the process of burning fuel for the *primary purpose* of producing heat or power by indirect heat transfer." This definition identifies fuel-burning equipment in a two-step, sequential process. According to the definition in IDAPA, fuel-burning equipment is first and foremost a particular structure used in the process of burning fuel (e.g. furnaces, boilers, etc.). Second, given a structure used in the process of burning fuel, it may still not qualify as fuel-burning equipment, unless the structure also burns the fuel for the primary purpose of producing heat or power. This second step of the definition of fuel- burning equipment asks, "Does the particular structure burn fuel for the primary purpose of generating power?" Correctly applying this definition to the turbines in the applicant's Samuels facility indicates that the turbines, indeed, constitute "fuel-burning equipment" and, therefore, must meet requirements per IDAPA 58.01.01.676.677 (5-1- 94).

As stated in Section 3.1 of the Memo, "The turbines [at the Samuels compressor station] use the natural gas in the pipeline as fuel and provide energy for the compressors." Applying the first part of the definition of fuel-burning equipment, it follows that the turbines are structures that burn fuel – in this case natural gas.
Applying the second part of the definition of fuel-burning equipment, it also follows that the turbines burn natural gas for the primary purpose of generating power – in this case generating power for the compressors.

DEQ failed to reach this conclusion due to the following. DEQ misstated the second part of the definition of fuel-burning equipment as "primary use" rather than "primary purpose." This semantic difference may have led DEQ to consider the primary purpose of this facility's turbines more broadly than is appropriate, as reflected by DEQ's statement that the primary use of the turbines is to compress gas. This statement is incorrect because the primary purpose of these turbines, as understood by the administrative definition of fuel-burning equipment, is to generate power for the compressors. The administrative definition identifies fuel-burning equipment based on the primary purpose of particular structures (e.g. furnaces, boilers, etc.), not entire facilities. While the primary purpose of the Samuels facility, as a whole, may be to compress gas, the primary purpose of the turbines within this facility is to generate power for the compressors.

As outlined above, the turbines at this facility meet the definition of fuel-burning equipment under IDAPA 58.01.01.006.45 (5-1-94). So too do the gas fired space- heating boilers of this facility, contrary to the applicant's comment in their permit renewal application at page 11. Therefore, the requirements of IDAPA 58.01.01.676.677 (5-1-94) must be reincorporated into this permit. If DEQ does not reincorporate these requirements, we request an explanation of DEQ's decision, including citations to any administrative or judicial determinations on which DEQ bases its decision.

Response 2: Turbines do not produce heat or power by *indirect* heat transfer, and cannot, therefore be considered to be fuel-burning equipment as defined in Idaho law. The combustion heat is applied *directly* to the turbine blades and converted to power mechanically, therefore turbines do not fall under the category of fuel-burning equipment as it is defined in IDAPA 58.01.01.006(45). This determination, excluding turbines from the fuel-burning definition in the Rules, has been in place since 2002, and was adopted after finding similar rule determinations in seven other states. One citation, as the commenter requested, is from the State of California ruling on the definition of fuel-burning equipment and reads as follows:

> California (Rule 4301 Fuel-burning Equipment): Any furnace, boiler, apparatus, stack and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by *indirect* heat transfer.

In 1999, the San Joaquin Valley Unified Air Pollution Control District made the following comments in the Preliminary Determination of Compliance for the La Paloma Generating Project, a proposed 1,048 MW power plant located near McKittrick, CA: "The District assumes...that the primary purpose of the gas turbine engines (GTEs) is to produce power mechanically, and that secondarily, the GTEs produce power by recovering heat from the exhaust heat which produces steam through the heat recovery steam generators. Thus, the District concludes that the GTEs are exempt from the emission limits of Rule 4301."

Colorado, Illinois, Maryland, Ohio, Oregon, and Virginia concur with this classification of stationary combustion turbines based on the *direct* conversion of heat to power.

Comment 3: We request DEQ or TransCanada perform ozone modeling to ensure that NOx emissions from the Samuels facility will not contribute to the formation of ozone and the degradation of ambient air quality in the local airshed. NOx and volatile organic compounds (VOCs) are the primary precursors to ozone formation. This facility has the potential to emit greater than 500 T/yr of NOx, and the facility is located next to a highway where vehicles also emit high levels of NOx and VOCs. Out of respect for the businesses and residents near this facility, DEQ and/or TransCanada should model ozone to ensure the cumulative emissions from the Samuels facility and highway emissions will not lead to local respiratory issues due to increases in low-level ozone. If this request is declined, we further request DEQ provide the basis for its decision.

Response 3: This Tier I operating permit renewal is issued in accordance with IDAPA 58.01.01.300 through 399 (Rules). These regulations do not require an applicant's demonstration of compliance with the National Ambient Air Quality Standards (NAAQS) through dispersion modeling. Idaho Rules define what applicable requirements are, and the NAAQS are not there. Tier I operating permits, also known as Title V operating permits, pursuant to the Clean Air Act, are designed to compile all applicable state and federal air quality requirements for an existing major facility into one document.

Appendix

Public Comments Submitted for

Tier I Operating Permit No.

T1-2016.0021

IDAHO
CONSERVATION
LEAGUE

208.265.9565 • PO Box 2308, Sandpoint, ID 83864 • www.idahoconservation.org

Anne Drier
Air Quality Division
DEQ State Office
1410 N. Hilton
Boise, ID 83706

Submitted via email to: anne.drier@deq.idaho.gov

April 17, 2017

RE: Tier I Air Quality Permit for TransCanada GTN, Samuels

Dear Ms. Drier:

Thank you for the opportunity to comment on the draft Tier I air quality permit renewal for the TransCanada GTN System facility in Samuels, ID. Since 1973, the Idaho Conservation League has been Idaho's leading voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting Idaho's human health and environment.

Attached, please find my comments on behalf of the Idaho Conservation League.

Thank you for your time and consideration. Please do not hesitate to contact me at (208) 265-9565 or mnykiel@idahoconservation.org if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Sincerely,

Matthew Nykiel
Conservation Associate

ICL Comments

Removal of 40 CFR 68 Requirement

First, section 4.1 of the Technical Memorandum (Memo) states that the requirements for 40 CFR 68 were removed. However, those requirements remain in the Draft Permit, so we request clarification as to what, if any, requirements will be removed in the final version of the permit.

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Ozone Emissions

We request DEQ or TransCanada perform ozone modeling to ensure that NO_x emissions from the Samuels facility will not contribute to the formation of ozone and

the degradation of ambient air quality in the local airshed. NO_x and volatile organic compounds (VOCs) are the primary precursors to ozone formation. This facility has the potential to emit greater than 500 T/yr of NO_x, and the facility is located next to a highway where vehicles also emit high levels of NO_x and VOCs. Out of respect for the businesses and residents near this facility, DEQ and/or TransCanada should model ozone to ensure the cumulative emissions from the Samuels facility and highway emissions will not lead to local respiratory issues due to increases in low-level ozone. If this request is declined, we further request DEQ provide the basis for its decision.